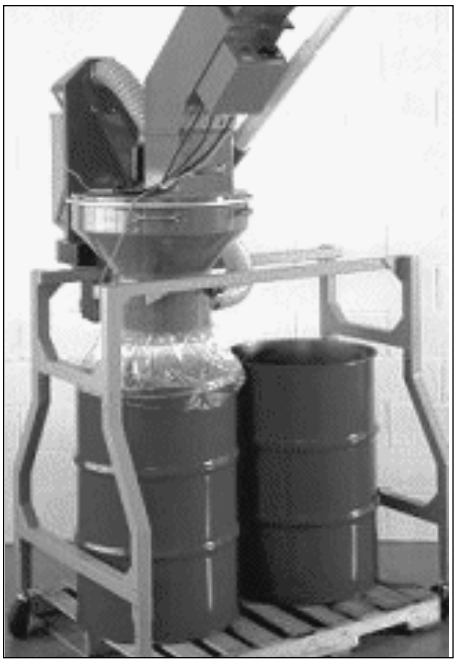
Navy Environmental Quality Fact Sheet

Do you dispose of fluorescent light tubes?

Would you like to improve this process in the following areas?

- ***Meeting environmental compliance regulations*** -- Eliminate the need to dispose of tubes as hazardous waste. Eliminate air emissions from broken tubes. Applicable regulatory area is RCRA.
- ***Improving workers' safety and health*** -- Eliminate potential worker exposure to mercury vapors.
- ***Increasing productivity*** -- Reduce labor costs by approximately 75%.
- ***Saving money***-- Eliminate the requirement to box and label spent fluorescent tubes.



Fluorescent light tube crusher

Managing spent fluorescent tubes can be expensive due to the labor required to package and label tubes prior to disposal or recycling. Crushing fluorescent tubes in a contained recycling unit is a much more efficient method of managing spent tubes. By crushing tubes there is less chance of breakage and the potential for worker exposure to mercury vapors is eliminated. Crushers are equipped with filters and other systems to prevent worker exposure to mercury vapors. After the tubes are crushed they can be disposed as a hazardous waste or recycled. This equipment has been installed and successfully used at several Navy installations. ***This equipment is available through GSA and the Navy Pollution Prevention Equipment Program.***

How can you achieve these improvements?

Use a Fluorescent Light Tube Crusher.

How does this equipment work?

Spent fluorescent light tubes are crushed in a fluorescent lamp disposer fitted with a filter cartridge and a polyurethane sleeve designed specifically to trap mercury vapor.

How will this equipment save you money?

Handling costs will be reduced due to the elimination of the need to box and label spent fluorescent tubes. Typically this equipment will pay for itself in less than four years. Typical cost to implement is $5,300.

How can this technology eliminate or reduce pollution?

This technology can eliminate the release of harmful mercury vapors due to the common occurance of lamp breakage. Crushing lamps will encourage proper disposal or recycling of spent lamps and in doing so divert trace amounts of mercury from disposal in municipal solid waste landfills. Used fluorescent lamp disposal in municipal landfills is considered the second largest source of mercury entering the environment. Implementation will result in the following pollution reductions:

- Prevents Spent Fluorescent Lamps from Being Disposed in Municipal Solid Waste Landfills
- Elimination of Harmful Mercury Vapor Air Emissions

Take action: How can you implement this technology?

- **Activity Shop & Work Center Personnel**. If you work at an activity, contact your Pollution Prevention Program Manager. The P2 Program Manager can provide more information and conduct a more detailed analysis, and may be able to provide this equipment at no cost to a Shop or Work Center.
- **Activity Pollution Prevention Manager**. Request funding for this technology through the Navy P2 Equipment Program. Depending on the application, the Environmental Requirements Cookbook may contain project submission information for annual budget submissions to your major claimant.
- **For Additional Technical Information**. More information about this technology can be found in the Joint Service P2 Opportunity Handbook Datasheet No. 2-07 (Web: http://www.nfesc.navy.mil/).

Achieving Environmental Compliance Through Pollution Prevention

Everyday the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by implementing pollution prevention technologies and methods to reduce compliance requirements. This Fact Sheet is one in a series designed to encourage activities to implement pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

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